

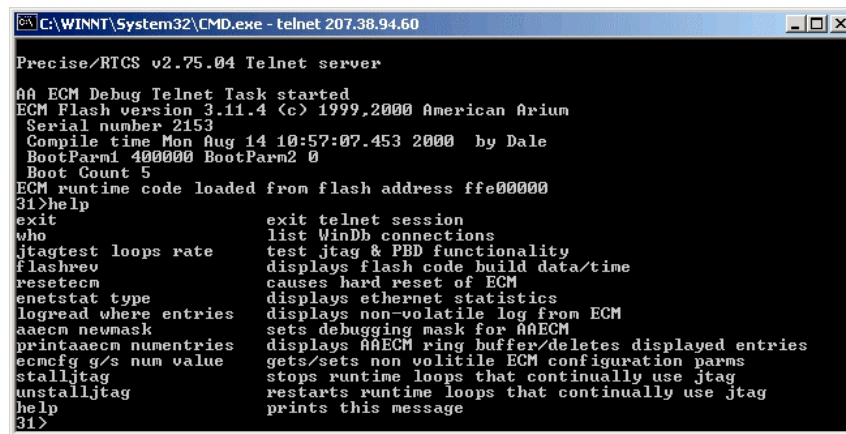
# Improving Communications: American Arium's New TELNET Interface

## An Application Note

[www.arium.com](http://www.arium.com)

### Overview

In general, TELNET is a program by which you can log into a remote computer. American Arium has written a TELNET interface that allows you to talk directly to one of our ethernet-connected COMET emulators without going through WinDb. It also provides some information that is not available through WinDb. Below is an illustration of a text box containing the list of commands available through AA's TELNET, and some examples illustrating the use of several of the commands.



```

C:\WINNT\System32\CMD.exe - telnet 207.38.94.60

Precise/RTCS v2.75.04 Telnet server

AA ECM Debug Telnet Task started
ECM Flash version 3.11.4 (c) 1999.2000 American Arium
Serial number 2153
Compile time Mon Aug 14 10:57:07.453 2000 by Dale
BootParm1 4000000 BootParm2 0
Boot Count 5
ECM runtime code loaded from flash address ffe00000
31>help
exit                exit telnet session
who                 list WinDb connections
jtagtest loops rate test jtag & PBD functionality
flashrev            displays flash code build data/time
resetecm            causes hard reset of ECM
enetstat type       displays ethernet statistics
logread where entries displays non-volatile log from ECM
aaecm newmask       sets debugging mask for AAECM
printaaecm numentries displays AAECM ring buffer/deletes displayed entries
ecmcfgr g/s num value gets/sets non volatile ECM configuration parms
stalljtag            stops runtime loops that continually use jtag
uninstalljtag       restarts runtime loops that continually use jtag
help                prints this message
31>
  
```

Sample AA TELNET text box

The TELNET session opens with several valuable pieces of information, depending on the emulator to which you are attached. In the sample above, the session describes the current flash version, the serial number of the emulator, and some boot information. The available commands are then listed. While some of the commands are self-explanatory, below is more detail about six of them.

Command	Comment
jtagtest loops rate	This command tests the JTAG and PBD functionality. It is especially valuable when used to validate whether the JTAG works. If not, that may be the reason WinDb won't run. Before and after running <b>jtagtest</b> , run the command <b>stalljtag</b> (see below).
flashrev	This command displays flash code data. The emulator saves the current and previous version of flash. If, for some reason, you want to run WinDb with the previous version of the flash (if, for example, you find it more compatible), you can access it here.

enetstat type	This command displays ethernet statistics. If you find you're having multiple, seemingly unrelated communications problems and need detailed information about how the ethernet connection is working, using this command will give you a significant amount of data.
ecmfg g/s num value	This command gets/sets non-volatile emulator configuration parameters. While most of these can be set in WinDb (under the <b>Options/Parameters</b> ), there are additional parameters that are not available there.
stalljtag	This command stops runtime loops that continually use the JTAG chain. Initiating the command prevents normal JTAG operations by the emulator so the user can run other commands.
uninstalljtag	This command restarts runtime loops that continually use the JTAG chain. Initiating the command frees the JTAG chain for use by the emulator for normal JTAG operations.

## Accessing the TELNET commands

To access these commands, you will need to know the IP address of the emulator. Once you have that:

1. Go to **Start|Run** on your desktop.
2. Type in "TELNET.EXE" (without the quotation marks).  
A TELNET window opens.
3. Select **Connect|Remote System** from the drop down menu.
4. In the **Connect** dialog box, go to the **Host Name** text box.
5. Type in the IP address. The **Port** and **Term Type** information is filled in automatically.
6. Click the **Connect** button.  
The screen fills with the type of introductory information shown above.
7. At the command prompt, type in "h" or "help" (without the quotation marks).  
The list of commands appears.



14811 Myford Road  
Tustin, CA 92780  
Voice: 714-731-1661  
Fax: 714-731-6344  
Web: [www.arium.com](http://www.arium.com)  
E-mail: [info@arium.com](mailto:info@arium.com)